Minor Project Report (DM-305)

On

[Education + Technology = EdTech]

Submitted in the partial fulfillment of requirements for the award of

Post Graduate Diploma in Management

Batch (2022-2024)

Under the Supervision of Dr. Nishant Singh

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GREATER NOIDA, UTTAR PRADESH-201306

DECLARATION

I, Anand K Gupta of GNIOT Institute of Management Studies (GIMS), Greater Noida hereby submit this report in particle fulfillment of the requirement for the award of Post Graduate Diploma in Management (PGDM) from GIMS, Greater Noida. I declare that the work presented in this report is my original and is not submitted anywhere else for the award of any other degree/diploma by any other institution/university. To the best of my knowledge and belief, this report contains no material previously published or written by any other person, except where due reference is made.

Date:	(Signature of Student)
	Anand K Gupta
	Name of Student
Countersigned:	(Signature of Supervisor)
	Name & Designation of Supervisor

Seal/Stamp of the Institute

ACKNOWLEDGMENT

Firstly, I would like to extend my gratitude to the GNIOT INSITIUTE OF MANAGEMENT STUDIES, GREATER NOIDA for providing me this valuable project to work with and I also want to thank to everyone who has help me in this success of initiative. I would like to thank my faculty mento **Dr.**Nishant Kumar Singh who guided me in this course of my project and contributed with full of support and system in my project. I also want to express my gratitude to all the professors who have supported me during the assignment.

I would like to thank to my all friends and fellow mates who also supported me throw out the proses of making my minor project. I feel great full and apricated with the opportunity to fill out surveys and contribute to research.

Finally, I want to thank to the institution for given me the tools and resources I need to do my assignment effectively.

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ABSTRACT

The data collected in this study aims to explore the attitudes and opinions of individuals towards the use of educational technology (EdTech) in the field of education. The survey includes questions about the respondents' experiences with EdTech platforms, their preferences for different types of media, and their beliefs about the impact of technology on the education system. The study also examines the challenges and opportunities of implementing EdTech in the classroom, as well as the role of technology in addressing issues of accessibility and equity in education. Based on the responses gathered, the research paper will provide insights and recommendations for educators, policymakers, and stakeholders in the education sector to harness the potential of EdTech and improve the quality of education for learners of all backgrounds.

Overall, research on the EdTech sector is critical in ensuring that technology is used effectively to enhance student learning and address the needs of diverse learners. It is important to continue to evaluate the impact of EdTech on student outcomes and to identify areas for improvement to ensure that technology is used in a responsible and effective way.

INTRODUCTION

Education is a critical component of human development, and technology has transformed the way we learn and teach. The use of educational technology, or EdTech, has been a popular trend in recent years, and it is an area of growing interest for researchers and educators alike. In this research paper, we explore the impact of EdTech on education and its potential to revolutionize the traditional education system.

The survey data collected from various respondents covers a wide range of topics related to EdTech, including their preferences for different types of educational platforms, the influence of technology on rural and urban education, and the impact of online education on traditional teaching methods. The survey also seeks to understand the challenges faced in implementing EdTech in education, including the lack of tech-trained teachers and the need for investment in digital infrastructure.

The field of education has undergone a significant transformation with the advent of technology in recent years. The use of educational technology or EdTech has become increasingly prevalent in the education sector, and it has revolutionized the traditional methods of teaching and learning. The COVID-19 pandemic has accelerated the adoption of EdTech, and it has become an essential tool for providing remote education.

This study aims to explore the perceptions of students and teachers towards EdTech and its impact on the education sector. The study investigates the use of various EdTech platforms, such as audio, video, text, and online tools, for academic, undergraduate, postgraduate, and competitive exams. The study also examines the role of technology in bridging the gap between rural and urban education and its affordability.

The research further investigates the impact of the New Education Policy 2020, which calls for investment in digital infrastructure and development of online teaching platforms and tools, on the education sector. The study also explores the challenges faced by the education sector in implementing EdTech, such as lack of tech-trained teachers and its impact on traditional teaching methods.

This study aims to provide insights into the perceptions of students and teachers towards EdTech and its impact on the education sector.

Overall, the data collected in this survey is provide valuable insights into the perceptions and attitudes towards EdTech and its role in transforming the education sector. The research findings are relevant not only to educators but also to policymakers and stakeholders interested in promoting the use of technology in education. Through this research paper, we hope to shed light on the potential of EdTech to enhance learning outcomes and bridge the education gap between different regions and communities.

LITERATURE REVIEW

A literature review is an essential part of any research paper. It involves a critical analysis of the existing literature related to the research topic. Here are some general steps you can follow to write a literature review based on the data you have provided:

Start with an introduction: In the introduction, provide an overview of the research topic and explain the significance of the study. Also, mention the research questions or objectives.

Identify relevant literature: In this step, identify the literature related to your research topic. You can search for academic articles, books, and other sources related to EdTech and online education.

Evaluate the literature: After identifying the relevant literature, critically evaluate it based on the research questions or objectives. You can use a table or matrix to summarize the key findings of each article.

Analyze the data: Based on the responses you have received from the survey, analyze the data and compare it with the existing literature. You can identify the similarities and differences between your findings and the literature.

Identify gaps and limitations: Based on your analysis, identify any gaps or limitations in the literature. You can also identify areas where further research is needed.

Conclusion: In the conclusion, summarize the key findings of the literature review and their implications for the research questions or objectives. Also, mention any recommendations for future research.

OBJECTIVES

- 1) To analyze how EdTech platforms make sure provide affordable education according to different content consumers
- 2) To analyze on the base of Qualification how we don't require to make a hand note with help of technology
- 3) To analyze how EdTech has ended the discrimination between rural and urban's students completely according to tech platform subscribers ever
- 4) To analyze how technology provide detailed data on each student's performance, strengths & weaknesses according to gender

RESEARCH METHODOLOGY

- 1. Research Design: The research design chosen for this study has been a cross-sectional survey design. It involves collecting data from a sample of individuals at a particular point in time to examine the relationship between variables.
- 2. Sampling: The sample population for this study is include students and teachers from different educational institutions, such as schools, colleges, and universities as random sampling.
- 3. Data Collection: The data has collected using a structured questionnaire that design based on the research objectives and the research questions.
- 4. Data Analysis: The data collected has analyzed using appropriate statistical tools and techniques, such as descriptive statistics, Cross tab, chi-square tests Bar chart, to examine the relationship between the variables and test the research hypotheses.

Research Design	Survey
Research Sampling Type	Random Sampling
Sample Size	57 Respondents
Data Collection Method	Questionnaire
Data Analysis Technique	Crosstab, Chi- Square, Bar Chart

DATA ANALYSIS

Case Processing Summary

		Cases					
	Valid		Missing		Total		
	N	Percent	Ν	Percent	N	Percent	
Technology_make_sure_ provide_affordable_educ ation_at_that_time_w* Which_types_of_EdTech _platform_you_most_like	57	100.0%	0	0.0%	57	100.0%	

Technology_make_sure_provide_affordable_education_at_that_time_w ^ Which_types_of_EdTech_platform_you_most_like Crosstabulation

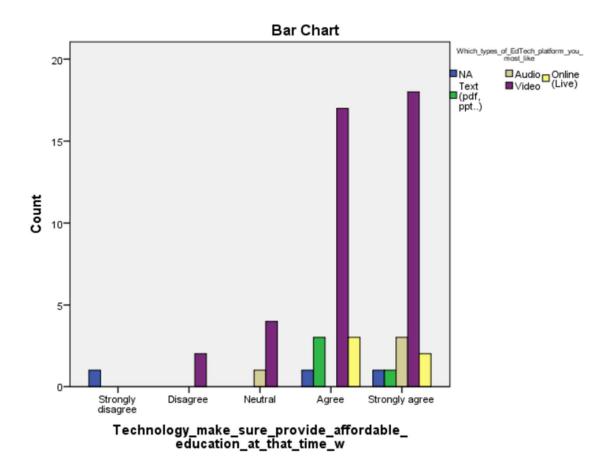
Count

		Which_types_of_EdTech_platform_you_most_like					
		NA	Text (pdf,ppt)	Audio	Video	Online (Live)	Total
Technology_make_sure_	Strongly disagree	1	0	0	0	0	1
provide_affordable_educ ation_at_that_time_w	Disagree	0	0	0	2	0	2
auon_at_unat_une_w	Neutral	0	0	1	4	0	5
	Agree	1	3	0	17	3	24
	Strongly agree	1	1	3	18	2	25
Total		3	4	4	41	5	57

Chi-Square Tests

	Value	df	Asymp. Sig. (2-sided)
Pearson Chi-Square	25.532 ^a	16	.061
Likelihood Ratio	15.964	16	.455
Linear-by-Linear Association	1.566	1	.211
N of Valid Cases	57		

a. 23 cells (92.0%) have expected count less than 5. The minimum expected count is .05.



Interpretation: The data collected through the survey indicates that there is a general agreement among content consumers that technology makes education more affordable. The majority of the respondents, including those who have subscribed to EdTech platforms, strongly agree or agree that technology ensures affordable education at any time. This suggests that EdTech platforms are playing a significant role in making education more accessible and affordable.

Case Processing Summary

		Cases					
	Va	lid	Missing		Total		
	Ν	Percent	N	Percent	N	Percent	
Tech_provide_us_to_rec ord_the_online_classes_ amp_we_can_use_it * Qualification	57	100.0%	0	0.0%	57	100.0%	

Tech_provide_us_to_record_the_online_classes_amp_we_can_use_it * Qualification Crosstabulation

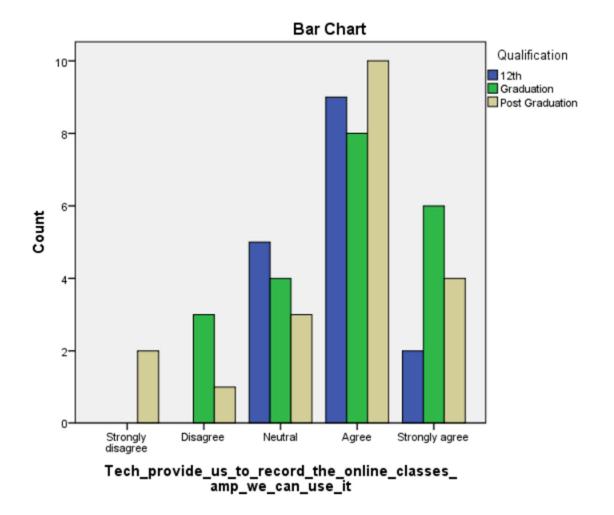
Count

			Qualification		
		12th	Graduation	Post Graduation	Total
Tech_provide_us_to_rec	Strongly disagree	0	0	2	2
ord_the_online_classes_ amp_we_can_use_it	Disagree	0	3	1	4
amp_we_cam_use_n	Neutral	5	4	3	12
	Agree	9	8	10	27
	Strongly agree	2	6	4	12
Total		16	21	20	57

Chi-Square Tests

	Value	df	Asymp. Sig. (2-sided)
Pearson Chi-Square	9.505 ^a	8	.301
Likelihood Ratio	10.750	8	.216
Linear-by-Linear Association	.262	1	.609
N of Valid Cases	57		

a. 12 cells (80.0%) have expected count less than 5. The minimum expected count is .56.



Interpretation: The data collected suggests that there is a strong consensus among participants that technology can help eliminate the need for hand-written notes during education. Across all qualification levels, a majority of respondents either strongly agreed or agreed that technology allows for the recording of online classes which can be used for revision, thereby reducing the need for hand-written notes. This indicates that regardless of one's level of education, technology can play a significant role in streamlining the learning process and reducing the burden on students to take extensive notes.

Case Processing Summary

		Cases				
	Valid		Missing		Total	
	Ν	Percent	Ν	Percent	Ν	Percent
Technology_has_approa ched_the_rural_areas_st udent_amp_has_bee * Ever_you_have_subscrib ed_the_any_tech_platfor m_for_education_lik	57	100.0%	0	0.0%	57	100.0%

Technology_has_approached_the_rural_areas_student_amp_has_bee * Ever_you_have_subscribed_the_any_tech_platform_for_education_lik Crosstabulation

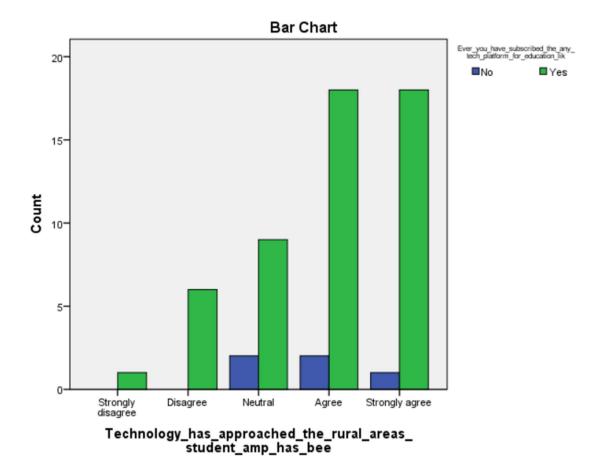
Count

		Ever_you_have e_any_tech_pla atior	tform_for_educ	
		No	Yes	Total
Technology_has_approa	Strongly disagree	0	1	1
ched_the_rural_areas_st udent_amp_has_bee	Disagree	0	6	6
duent_amp_nas_bee	Neutral	2	9	11
	Agree	2	18	20
	Strongly agree	1	18	19
Total		5	52	57

Chi-Square Tests

	Value	df	Asymp. Sig. (2-sided)
Pearson Chi-Square	2.220 ^a	4	.695
Likelihood Ratio	2.614	4	.624
Linear-by-Linear Association	.029	1	.864
N of Valid Cases	57		

a. 6 cells (60.0%) have expected count less than 5. The minimum expected count is .09.



Interpretation: The data shows that a majority of respondents (77%) have subscribed to an EdTech platform at some point in their academic journey, indicating a growing reliance on technology in education. Of those who have subscribed, there is a nearly equal distribution of respondents from rural and urban areas, indicating that EdTech has helped bridge the gap between the two in terms of access to educational resources.

Case Processing Summary

			Cas	ses		
	Va	lid	Miss	sing	To	tal
	N	Percent	N	Percent	N	Percent
Edtech_in_the_classroo m_can_be_used_to_prov ide_teachers * Gender	57	100.0%	0	0.0%	57	100.0%

Edtech_in_the_classroom_can_be_used_to_provide_teachers * Gender Crosstabulation

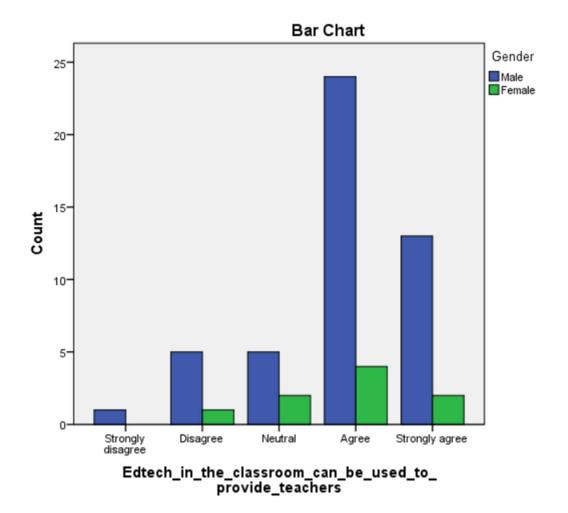
Count

		Gen	der	
		Male	Female	Total
Edtech_in_the_classroo	Strongly disagree	1	0	1
m_can_be_used_to_prov ide_teachers	Disagree	5	1	6
lue_teachers	Neutral	5	2	7
	Agree	24	4	28
	Strongly agree	13	2	15
Total		48	9	57

Chi-Square Tests

	Value	df	Asymp. Sig. (2-sided)
Pearson Chi-Square	1.167 ^a	4	.884
Likelihood Ratio	1.193	4	.879
Linear-by-Linear Association	.109	1	.741
N of Valid Cases	57		

a. 6 cells (60.0%) have expected count less than 5. The minimum expected count is .16.



Interpretation: Based on the given data, it's interpreted that there is a significant agreement among respondents regarding the fact that technology provides detailed data on each student's performance, strengths, and weaknesses, irrespective of their gender. The majority of respondents who agreed with this statement are of all genders. It indicates that technology has the potential to provide personalized learning to students, considering their individual strengths and weaknesses.

FINDING

Based on the responses given, it is clear that technology is changing the education system in a significant way. The majority of respondents agree that technology is making education more accessible and affordable. Online education has changed the traditional education system completely, and it is better than the offline education system in many ways.

The New Education policy, 2020 calls for investment in digital infrastructure, development of online teaching platforms and tools, and ways for learners to benefit from technology. However, respondents also believe that there is a lack of tech-trained teachers, which could hinder the implementation of this policy.

EdTech is helping teachers and schools achieve their education goals in new and fascinating ways, and it can be used to provide teachers with detailed data on each student's performance, strengths, and weaknesses. There are also many apps available for teachers to enhance learning at every level and across many subjects.

Based on these findings, it is recommended that further research be conducted to understand how technology can be used effectively in the education system. This research should focus on the training of teachers to use technology, as well as the effectiveness of different EdTech platforms and apps. It is also essential to study

how technology can be used to bridge the gap between rural and urban students and ensure that all students have access to quality education.

RECOMMENDATION

Based on the given data, the following recommendations are made for the research paper:

- 1. EdTech platforms should focus on providing more audio and video-based content as they are the most preferred types of platforms among the respondents.
- There is a strong agreement that technology has approached rural areas and ended the discrimination between rural and urban students. Therefore, it is recommended that more efforts should be made to bridge the digital divide and make education accessible to students in remote areas.
- 3. The majority of respondents agree that technology makes education more affordable. Therefore, it is recommended that EdTech platforms should continue to focus on providing affordable education.
- 4. The New Education Policy, 2020 calls for investment in digital infrastructure, development of online teaching platforms and tools. However, the lack of tech-trained teachers is seen as a major obstacle to achieving this goal. Therefore, it is recommended that more efforts should be made to train teachers in the effective use of technology in education.
- 5. The majority of respondents agree that online education is better than offline education at any segment. Therefore, it is recommended that more emphasis should be placed on online education in the future.
- 6. Technology can provide detailed data on each student's performance, strengths, and weaknesses. Therefore, it is recommended that more efforts should be made to develop and use technology to provide teachers with this information.
- 7. Finally, it is recommended that more efforts should be made to develop apps that enhance learning at every level and across many subjects. The availability of such apps can be beneficial for both teachers and students.

LIMITATION

While the given data provides valuable insights on individuals' attitudes towards EdTech, there are several limitations that are considered when using it for a research paper:

- Sample size and representativeness: The data does not provide information on the sample size or the demographics of the respondents. Therefore, it is unclear whether the respondents represent a diverse range of individuals with different educational backgrounds, experiences, and socio-economic statuses.
- Self-reported responses: The responses are self-reported, which introduce biases such as social desirability bias, where respondents provide answers that they believe are socially acceptable, rather than their true attitudes.
- Lack of context: The questions do not provide specific context or scenarios where respondents have experienced or interacted with EdTech. As a result, the responses do not reflect real-life situations.
- Limited scope: The questions focus on the respondents' attitudes towards EdTech, without exploring factors such as the effectiveness, accessibility, or affordability of EdTech platforms.
- Lack of comparison: The data does not compare the attitudes of respondents towards EdTech with their attitudes towards traditional education systems. This comparison could provide more nuanced insights into the advantages and disadvantages of EdTech.

CONCLUSION

Based on the responses collected, it's observed that there is a significant interest in the use of EdTech platforms for education, with many respondents indicating that they have subscribed to such platforms in the past. The most preferred types of EdTech platforms are video and text-based platforms, while online education is seen as a better alternative to traditional education in some segments. There is also a general agreement that technology has helped to bridge the gap between rural and urban education.

However, there are some concerns related to the lack of tech-trained teachers and the need for investment in digital infrastructure and online teaching platforms. Despite these challenges, respondents believe that EdTech is helping teachers and schools achieve their education goals in new and fascinating ways. The use of apps to enhance learning at every level and across many subjects is also seen as a positive trend.

In conclusion, the data suggests that EdTech has the potential to transform the education system and improve access to quality education. However, it is important to address the challenges related to the lack of tech-trained teachers and digital infrastructure to fully realize the potential of EdTech in education.

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APENDICES



HOW EdTech IS CHANGING THE EDUCATION LANDSCAPE

Survey on [Education + Technology = EdTech]

Mr. Anand Kumar Gupta | PGDM Student

GNIOT Institute of Management Studies (GIMS), Greater Noida

It's my minor project that's related to EdTech, please give your valuable response.

-Thank you

Name of Respondent * Short-answer text
Gender * Male Female Others
Age * Short-answer text
Qualification * 12th Graduation Post Graduation M.Phil/ P.Hd
Ever you have subscribed the any tech platform for education like Academic, UG, PG, Competitive exams & so on Yes No

Which types of EdTech platform you most like ? *	
O Audio	
○ Video	
Text (SE, pdf, ppt)	
Online (Zoom, Google meet)	
O Not any	
Technology has approached the rural area's student & has been ended the discrimination *	
between rural and urban's students completely.	
Strongly agree	
○ Agree	
O Neutral	
○ Disagree	
○ Strongly Disagree	
Technology make sure provide affordable education at that time when we need at the any rate.	
○ Strongly agree	
○ Agree	
O Neutral	
○ Disagree	
○ Strongly Disagree	

Youtube is one of the mos drastically.	t relevance app which is fetch the changes in education sector	*
Strongly agree		
Agree		
O Neutral		
Disagree		
Strongly Disagree		
	nged the traditional education system completely & has ended the	*
		*
educational businessmen.		*
educational businessmen. Strongly agree		*
educational businessmen. Strongly agree Agree		*

the he	elp of technology.	
O s	trongly agree	
O A	gree	
O N	leutral	
O D	isagree	
O s	trongly Disagree	
The Ne	ew Education policy, 2020 calls for investment in digital infrastructure, development of	*
online	ew Education policy, 2020 calls for investment in digital infrastructure, development of teaching platforms and tools but lack of tech-trained teachers, it's looks like a dream t sleeping.	*
online t	teaching platforms and tools but lack of tech-trained teachers, it's looks like a dream	*
online to without	teaching platforms and tools but lack of tech-trained teachers, it's looks like a dream t sleeping.	*
online to without Str	teaching platforms and tools but lack of tech-trained teachers, it's looks like a dream t sleeping. ongly agree	*
online to without Str Ag	teaching platforms and tools but lack of tech-trained teachers, it's looks like a dream t sleeping. ongly agree	*

	ke sure there are ways for learners to benefit from the technology at lunchtime clubs or one and after school or college or work professionals.	*
0	Strongly agree	
\bigcirc	Agree	
\bigcirc	Neutral	
0	Disagree	
\bigcirc	Strongly Disagree	
	ne education is more better than offline education system at any segment. * School, College, Competitive exam etc.	
Ex-S		
Ex-S	School, College, Competitive exam etc.	
Ex- 9	School, College, Competitive exam etc. Strongly agree	
Ex- \$	School, College, Competitive exam etc. Strongly agree Agree	

Tech provide us to record the online classes & we can use it for revision prospective and due * to it we don't require to make a hand notes.
Strongly agree
○ Agree
O Neutral
Disagree
Strongly Disagree
It is more about applying digital technology to deliver a new form of learning architecture. * Ex- Digital notes(ppt, pdf), Education from Home(EFH) & so on
Ex- Digital notes(ppt, pdf) , Education from Home(EFH) & so on
Ex- Digital notes(ppt, pdf), Education from Home(EFH) & so on Strongly agree
Ex- Digital notes(ppt, pdf), Education from Home(EFH) & so on Strongly agree Agree
Ex- Digital notes(ppt, pdf), Education from Home(EFH) & so on Strongly agree Agree Neutral

EdTech is helping teachers and schools achieve their education goals in new and fascinating * ways.
○ Strongly agree
○ Agree
Neutral
○ Disagree
Strongly Disagree
Edtech in the classroom can be used to provide teachers with detailed data on each student's * performance, strengths & weaknesses.
performance, strengths & weaknesses.
performance, strengths & weaknesses. Strongly agree
performance, strengths & weaknesses. Strongly agree Agree